# Oak SILVAH Partnership

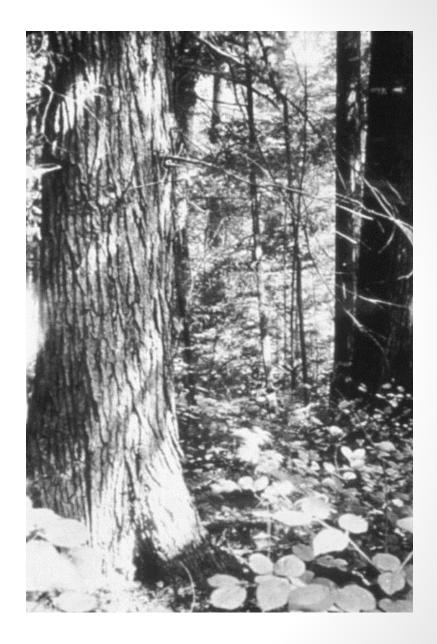
Creating a community of practice to sustain forests



Barbara McGuinness Environmental Literacy Coordinator Northern Research Station

# A little history...

 Before European settlement, the forests of the Allegheny Plateau were predominately Eastern hemlock and American beech



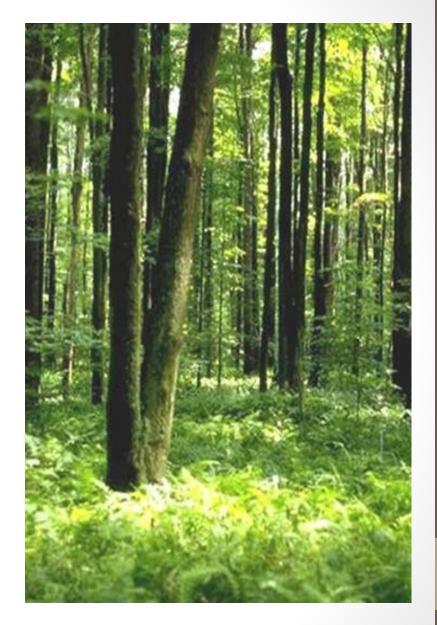
# A little history...

 By the 1930s, almost all of these forests had been clearcut at least once, dramatically changing the composition of our forests



# A little history...

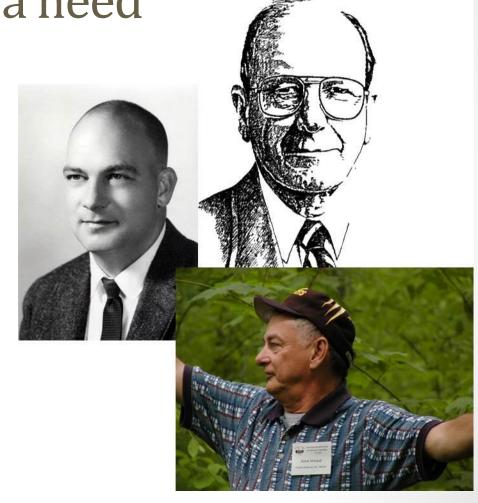
 In the 1960s, when forest industry began cutting second growth forests, they found the forests would not regenerate





#### Research to meet a need

- PSU Cooperative Extension
- Northeastern Forest
   Research Station
- Hammermill Paper Company
- Kane Hardwood







#### Allegheny Hardwood — Understory Inventory

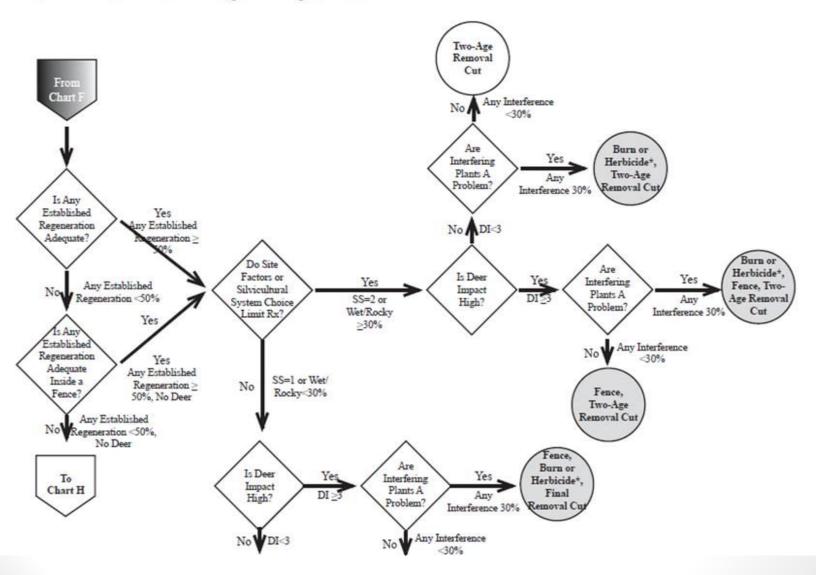
Identification Data	Site Index	Comments:		
Owner	Site Index Species			
Forest Name	Site Class	FOREST SERVICE		
County	Restrictions on Silvicultural System?	71 IA C		
Compartment	None No clearcut No even-aged No multi-tree gaps	CTO		
Stand Area	Prescription Chart? No./Allegheny Hdwd. Mixed Oak	THENT OF AGRICUS		
Year of Origin	Start Regenerating? Yes Yes, if stand is mature No			
Deer Impact unknown very high high mod. low very low	Increase Oak? Yes No Residuals Desired? Yes No	USDA Forest Service, NRS, Warren, PA		

#### **Regeneration & Interference**

	DI ANT 1		C Intel		-		
$ldsymbol{le}}}}}}$	Plot Number						
6 ft. plot	Black cherry (#)						
	Yellow-poplar (#)						
	Other desirable (#)						
	Competitive Oak (#)						
	Established oak (#)						
	New oak (#)						
	Conifers (#)						
	Saplings (spp. code)						30
	Residuals (spp. code)						
	Tall Woody Interf. (spp. code)						
26 ft. plot	Low Woody Cover (%)						
	Low Woody Interference (spp. code)						
	Fern Cover (%)						
	Grass/Sedge Cover (%)						
	Grapevine (#)						0:
	Site Limitations (1-3)						
	Deer Impact (1-5)						
	NNIS (spp. code)						



Chart G. Mixed Oak - Releasing Oak Regeneration







## What is SILVAH?

• SIL viculture of Allegheny Hardwoods



#### SILVAH is:

- A collection of research
- Systematic guidelines for inventory, analysis, and prescription
- Professional training
- A computer program



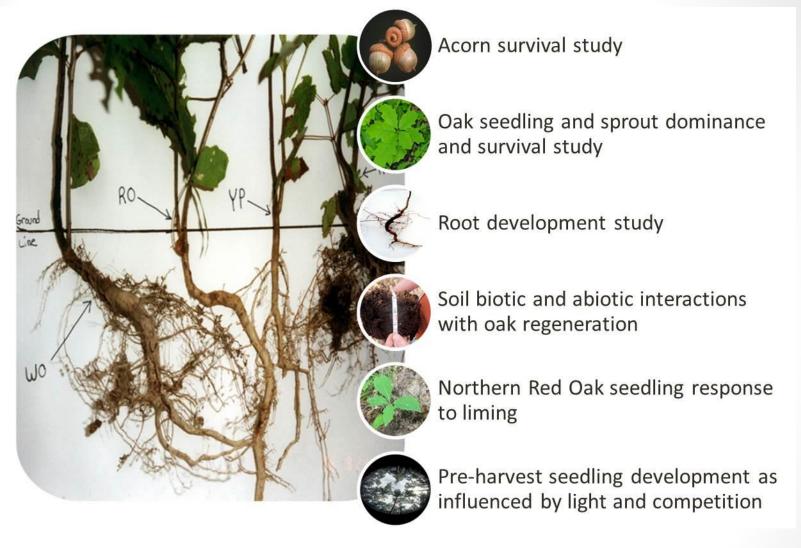




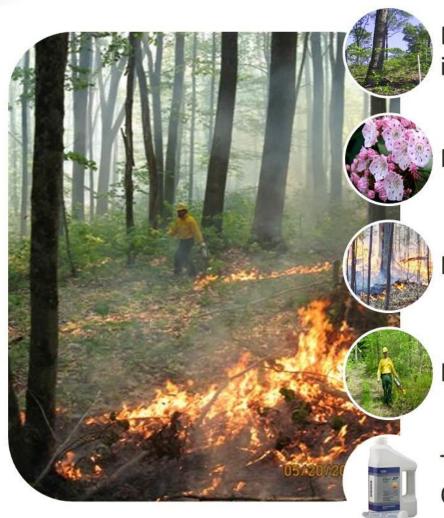
### Oak SILVAH

- Initiated by the Pennsylvania Bureau of Forestry
- Draws on research from a broader geographic region
- 90+ BOF foresters and others beta-tested the new inventory techniques





A new suite of research to fill the gaps, relating to oak ecology...



Development of regeneration in two-age stands

Mountain laurel study

Fire behavior/Fuel models

Herbicide-burn study

Treatment effectiveness of Oust

and management.



# Creating a community of practice

- A common vocabulary
- A systematic framework





## Our primary partners

- Pennsylvania Department of Conservation and Natural Resources Bureau of Forestry
- Pennsylvania Game Commission
- The Pennsylvania State University
- Jefferson County Conservation District
- Ohio Department of Natural Resources Division of Forestry and Wildlife
- Ohio State University
- Maryland Department of Natural Resources
- Garrett County Forestry Board
- West Virginia Forestry Association
- The Nature Conservancy
- USFS Eastern Region





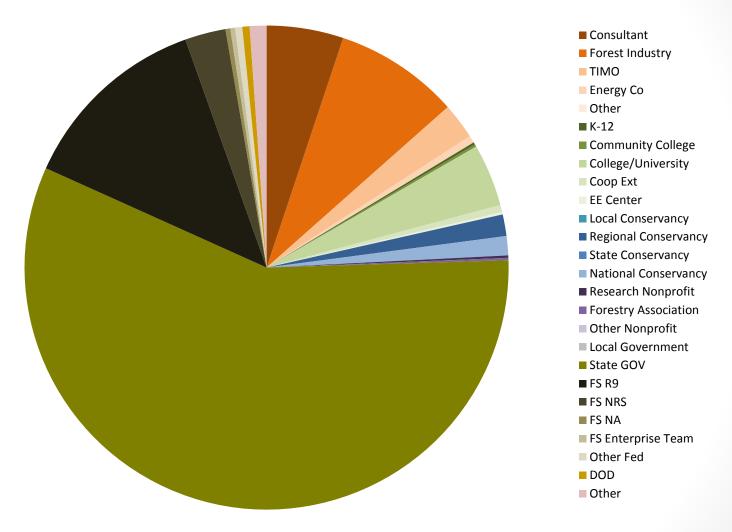




Forest Service Northern Research Station

Oak SILVAH Participants by Session







Forest Service
Northern Research Station

Oak SILVAH Participants by Affiliation





Managers can show their choices are based on the latest scientific information available





















Increased opportunity for treatments across land ownerships







# Best practices: Research

- Open lines of communication between scientists and land managers
- Periodic face-to-face meetings to brainstorm and discuss emerging needs





# Best practices: Training sessions

- Ensure a mix of agencies and organizations at every training session and in each crew to facilitate networking and communication
- Breaks and a shared meal build connections
- At least a 50/50 split of lecture and field time
- Scientists participate throughout the week
- Shared contact lists (faculty and participants)

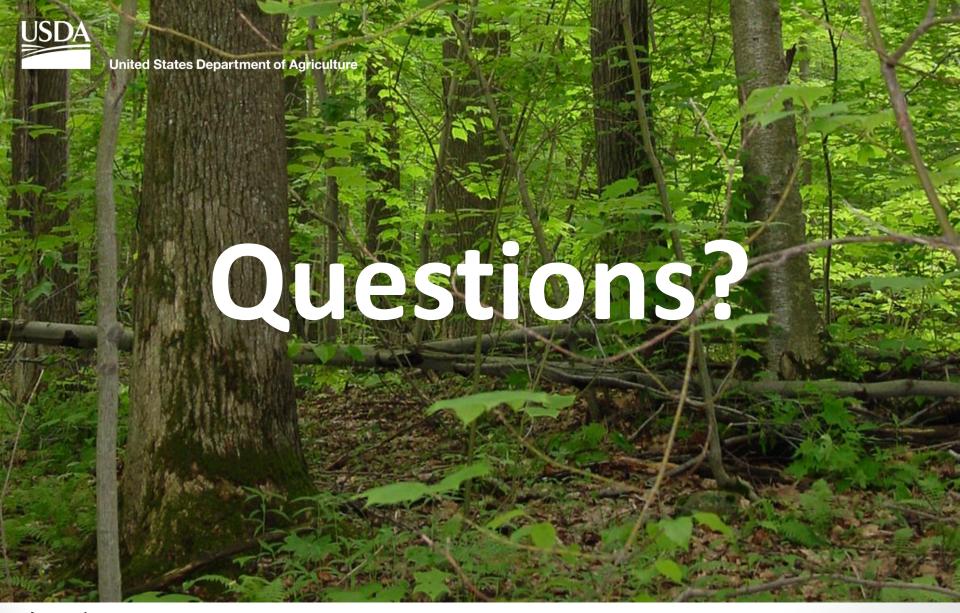




"SILVAH provides a tool; that makes it very easy for everyone from entry-level to seasoned foresters to enter data and get a reasonable prescription for silviculture treatment. It's a tremendously worthwhile tool, they are solving real problems."

 Jim Grace, former Maurice K Goddard Chair in Forestry and Environmental Resource Conservation at Penn State University;
 Pennsylvania State Forester; and Assistant Secretary of Pennsylvania Department of Conservation and Natural Resources







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